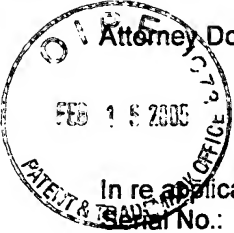


15m



Attorney Docket No.: MSB-7273-D1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of
Serial No.:
Filed:
For:

Armen B. Shanafelt
10/826,809
April 17, 2004
IL-2 Selective Agonists and Antagonists

Preliminary Class: 514

CERTIFICATION OF MAILING UNDER 37 C.F.R. 1.8(a)

I hereby certify that, on the date shown below, this correspondence and attachments are being deposited with Federal Express Service in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

2-7-05
Date

Barbara Cantora
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Commissioner for Patents
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Transmittal of Information Disclosure Statement
Within Three Months of Filing or
Before Mailing of First Office Action (37 C.F.R. 1.97(b))

Sir:

Enclosed please find the following documents in connection with the above-identified application:

- 1) Information Disclosure Citation (Form PTO-1449); and
- 2) Copies of references cited.

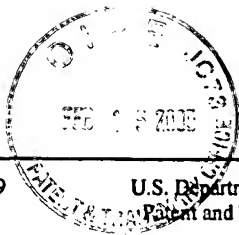
Identification of Time of Filing the Accompanying
Information Disclosure Statement

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national state of an international application or before the mailing date of a first Office Action on the merits, whichever event occurs last. 37 C.f.R. 1.97(b).

Respectfully submitted,

John W. Mahoney
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Date: Feb. 7th, 2005



Form PTO-1449
(Rev. 8-83)

U.S. Department of Commerce
Patent and Trademark Office

107
Serial No.
826,809

Group Art Unit

Filing Date
4-17-04

Atty. Docket No.
MSB-7273-D1

Applicant(s) Armen B. Shanafelt

INFORMATION DISCLOSURE CITATION

U.S. PATENT DOCUMENTS

*		DOCUMENT NO.	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

*		DOCUMENT NO.							DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
													YES	NO
	M	0	2	6	7	7	9	5	05/18/88	EP	C07K	13/00		
	N	0	1	6	3	2	4	9	12/04/85	EP	C12N	15/00		X
	O	0	1	1	9	6	2	1	09/26/84	EP	C12N	15/00		

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

S	Zurawski S.M. and Zurawski G., Receptor antagonist and selective agonist derivatives of mouse interleukin-2, Embo.J., 11(11): 3905-3910 (1992)
T	Zurawski et al., Definition and spatial location of mouse interleukin-2 residues that interact with its heterotrimeric receptor, Embo.J., 12(13): 5113-5119 (1993)
U	Thèze et al., Interleukin 2 and its receptors: recent advances and new immunological functions, Immunol. Today, 17(10): 481-486 (1996)
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W	Jacobson et al., Rational interleukin 2 therapy for HIV positive individuals: Daily low doses enhance immune function without toxicity, Proc.Natl.Sci., 93: 10405-10410 (1996)
X	Smith K. A., Lowest Dose Interleukin-2 Immunotherapy, Blood, 81(6): 1414-1423 (1993)
Y	Kaplan et al., Rational Immunotherapy with Interleukin 2, Biotech., 10(2): 157-162 (1992)
Z	Buchli et al., Structural and Biologic Properties of a Human Aspartic Acid-126 Interleukin-2 Analog, Arch.Biochem. Biophys., 307(2): 411-415 (1993)
AA	Cellular and Molecular Immunology, Abbas et al., eds., 1997, W.B. Saunders Company, Chapter 12, Cytokines, pp. 250-267
BB	Immunology, Roitt et al., eds., 1996, pp. 8.8-8.16, Fourth Edition, Mosby

EXAMINER

DATE CONSIDERED

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*		DOCUMENT NO.							DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
	A	5	6	9	6	2	3	4	12/09/97	Zurawski et al.	530	351	08/01/94
	B	5	2	2	9	1	0	9	07/20/93	Grimm et al.	424	85.2	04/14/92
	C	5	2	0	6	3	4	4	04/27/93	Katre et al.	530	351	01/11/88
	D	5	1	1	6	9	4	3	05/26/92	Koths et al.	530	351	05/10/88
	E	4	9	5	9	3	1	4	09/25/90	Mark et al.	435	69.1	02/07/85
	F	4	8	5	3	3	3	2	08/01/89	Mark et al.	435	252.33	12/21/84
	G	4	5	8	8	5	8	5	05/13/86	Mark et al.	424	85	09/08/84
	H	4	5	1	8	5	8	4	05/21/85	Mark et al.	424	85	12/20/83

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													YES	NO
	I	9	7	4	1	2	3	2	11/06/97	WO	C12N	15/24		
	J	9	7	3	1	6	2	2	09/04/97	WO	A61K	9/06		
	K	9	6	0	6	8	6	0	03/07/96	WO	C07K	14/54		
	L	8	9	0	4	6	6	5	06/01/89	WO	A61K	37/02		

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

P	Zurawski, S.M. and Zurawski, G., Mouse interleukin-2 structure-function studies: substitutions in the first α -helix can specifically inactivate p70 receptor binding and mutations in the fifth α -helix can specifically inactivate p55 receptor binding, Embo.J., 8(9): 2583-2590 (1989)
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R	Zurawski, G., Analysing lymphokine-receptor interactions of IL-1 and IL-2 by recombinant-DNA technology, Trends Biotech., 9: 250-257 (1991)

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